

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

IMPLICIT, LLC,

Plaintiff,

v.

PALO ALTO NETWORKS, INC.,

Defendant.

CIVIL ACTION NO. 6:17-cv-00182-JRG
(LEAD CONSOLIDATED CASE)

JURY TRIAL DEMANDED

**DEFENDANT PALO ALTO NETWORKS, INC.'S RESPONSIVE
CLAIM CONSTRUCTION BRIEF**

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. THE DEMULTIPLEXING PATENTS	1
A. Overview.....	1
B. Disputed Terms	2
1. “message” (’683 Patent claims 1, 24, 25; ’790 Patent claims 1, 8, 13, 15; ’104 Patent claims 1, 10, 16)	2
2. “process/processing . . . packets” (’683 Patent claims 1, 24; ’790 Patent claims 1, 8, 15; ’104 Patent claims 1, 3, 10, 16).....	5
3. “state information” (’104 Patent claims 1, 10, 16)	8
a. PAN’s Proposal is Compelled by the Intrinsic Record.....	8
b. “Plain and Ordinary Meaning” Is Inappropriate	11
4. “key [value]” (’790 Patent claims 1, 2, 15, 16; ’104 Patent claims 1, 10, 16)	12
a. The Meaning of “Key [Value]”	12
b. The Sequence of the Steps	14
5. “removing [an / the resulting] outermost header” (’683 Patent, cl. 24)	17
C. The Applet Patent	19
1. “resource” (’740 Patent, Claims 1, 9, 10, 11, 13, 19, 20)	19

TABLE OF AUTHORITIES

Cases

<i>Altiris, Inc. v. Symantec Corp.</i> , 318 F.2d 1363 (Fed. Cir. 2003)	14-15
<i>Ampex Corp. v. Eastman Kodak Co.</i> , 460 F.Supp. 2d 541 (D. Del. 2006).....	15
<i>Implicit Networks, Inc. v. F5 Networks, Inc.</i> , No. C10-3365-SI (N.D. Cal.).....	8
<i>Implicit, LLC v. Trend Micro, Inc.</i> , No. 6:16-cv-0080-JRG (E.D. Tex.).....	<i>Passim</i>
<i>Intamin, Ltd. v. Magnetar Techs., Corp.</i> , 483 F.3d 1328 (Fed. Cir. 2007).....	16
<i>Interactive Gift Express, Inc. v. CompuServe Inc.</i> , 256 F.3d 1323 (Fed. Cir. 2000).....	14
<i>O2 Micro Int’l, Ltd. v. Beyond Innovation Tech. Co.</i> , 521 F.3d 1351 (Fed. Cir. 2008).....	12
<i>Oak Tech., Inc. v. ITC</i> , 248 F.3d 1316 (Fed. Cir. 2001).....	15
<i>Omega Eng’g Inc. v. Raytek Corp.</i> , 334 F.3d 1314 (Fed. Cir. 2003)	10
<i>Ormco Corp. v. Align Tech., Inc.</i> , 498 F.3d 1307 (Fed. Cir. 2007).....	9
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005) (en banc)	20
<i>PODS, Inc. v. Porta Stor, Inc.</i> , 484 F.3d 1359, 1366 (Fed. Cir. 2007).....	10
<i>Regents of Univ. of Minn. v. AGA Med. Corp.</i> , 717 F.3d 929 (Fed. Cir. 2013).....	9
<i>Renishaw PLC v. Marposs Societa’ Per Azioni</i> , 158 F.3d 1243 (Fed. Cir. 1998).....	3, 17
<i>Verizon Servs. Corp. v. Vonage Holdings Corp.</i> , 503 F.3d 1295 (Fed. Cir. 2007)	19
<i>Versata Software, Inc. v. SAP America, Inc.</i> , 2009 WL 1408520 (E.D. Tex. May 19, 2009).....	15
<i>Visto Corp. v. Good Tech., Inc.</i> , 2008 WL 163576 (E.D. Tex. 2008)	15

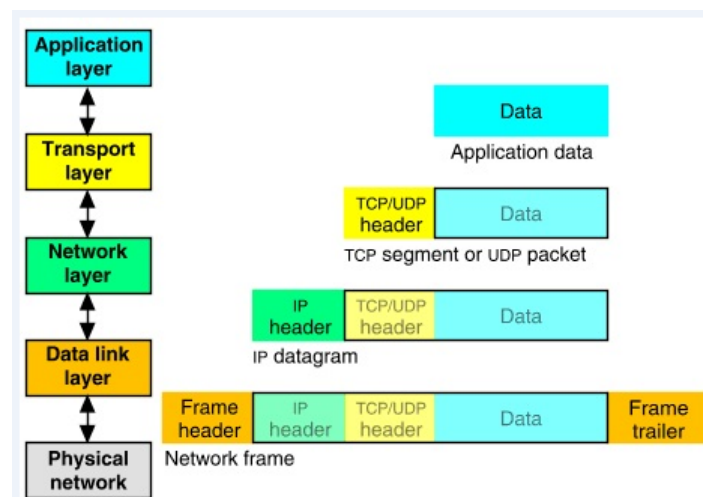
I. INTRODUCTION

Pursuant to P.R. 4-5(b), Defendant Palo Alto Networks, Inc. (“PAN”) hereby submits its Responsive Claim Construction Brief for the asserted claims of U.S. Patent Nos. 8,694,683 (the “’683 Patent”), 9,270,790 (the “’790 Patent”), 9,591,104 (the “’104 Patent”), and 9,325,740 (the “’740 Patent”). The ’683, ’790, and ’104 Patents are collectively referred to herein as the “Demultiplexing Patents.” The ’740 Patent is referred to herein as the “Applet Patent.”

II. THE DEMULTIPLEXING PATENTS

A. Overview

Generally, the Demultiplexing Patents disclose dynamically identifying a series of software routines that convert packets of a “message” from one format into another format. For example, to transmit an audio file (which is an example of a “message” according to the specification) over a network, the transmitting computer will break the data that makes up the audio file into small chunks, or “packets,” for transmission over the network to the receiving computer. Each packet is made up of various “layers,” with each layer containing data in a different format. For example, layers in the TCP/IP network model are illustrated below.



As shown above, the data at each layer will contain the header information for that layer, as well as the header information for lower layers, and the application payload data (*e.g.*, the actual audio data in this example).

At the receiving computer, after receiving the first packet of the message, the computer identifies the appropriate sequence of software routines needed to process the data at each layer of the packet. The software routines then convert the format of the data at each layer, until the audio data is in a format that is suitable for playing by the receiving computer. After the receiving computer identifies the appropriate sequence of routines for processing the packets in a given message, it stores that sequence of routines and applies it to the remaining packets in the message.

B. Disputed Terms

1. **“message”** (’683 Patent claims 1, 24, 25; ’790 Patent claims 1, 8, 13, 15; ’104 Patent claims 1, 10, 16)

Implicit’s Proposal	PAN’s Proposal
“a collection of data that is related in some way, such as a stream of video or audio data or an email message”	“a collection of <u>application</u> data that is related in some way, such as a stream of video or audio data or an email message”

The Parties agree that a full construction is necessary, and the only difference between the Parties’ proposals is the word “application” in PAN’s proposal, underlined above.

The addition of the word “application” is necessary to resolve an ambiguity about the meaning of the term “message” that became apparent during the *Trend* litigation. Ex. A, *Implicit, LLC v. Trend Micro, Inc.*, No. 6:16-cv-0080-JRG (E.D. Tex.), Trend Micro, Inc.’s Reply in Support of Its Motion for Summary Judgment, Dkt. 233 at 6-7. In the *Trend* litigation, the Parties initially agreed on the construction proposed by Implicit here. *Id.* at 7. However, a dispute then arose as to what the construction actually means. Specifically, Implicit appeared to stretch the construction so that it could argue that TCP handshake packets used to establish a connection

between two devices are part of a “message.” *Id.* at 8. TCP handshake packets, of course, do not transmit any user data or content (*i.e.*, application data); instead, they just establish the connection over which application data may then be transmitted. The parties in the *Trend* litigation thereafter disputed whether each party was misconstruing the agreed construction of “message” – in other words, the agreed construction did not actually resolve the parties’ dispute as to the scope of the claim term. In view of that dispute, the patentee’s statement relied upon by Implicit for its construction, standing alone, does not have “reasonable clarity, deliberateness, and precision” as Implicit alleges. *Renishaw PLC v. Marposs Societa’ Per Azioni*, 158 F.3d 1243, 1249 (Fed. Cir. 1998). The Court should address this ambiguity to avoid a similar problem in this case.

As reflected in PAN’s construction, a “message” is the data that is of interest to the users of the claimed invention – *e.g.*, “a stream of video or audio data or an email message,” (’683 Patent at 2:49-51)¹ which are all examples of application data (a point that Implicit concedes). Implicit Br. at 7. Implicit feigns uncertainty as to the origin of the word “application” in PAN’s construction, but it is an ordinary term used to express the concept of user data or content. Thus, the extrinsic evidence defines a “message” as “a logical grouping of information at the **Application** Layer (Layer 7) of the OSI Reference Model.” Ex. B, Novell’s Dictionary of Networking at 360. (emphasis added).²

Of course, the claim term is not limited to only the specific examples of “a stream of video or audio data or an email message”; other types of application data would satisfy the claim as well. The point is that the examples are illustrative of the types of “data” that would be “related in some way” in the context of the claims – and it is always application data (which can also be expressed

¹ The Patents-in-Suit are attached as exhibits to Implicit’s Opening Brief.

² Emphasis is added herein unless otherwise indicated.

as “content” or “user data”). In contrast, Implicit would make the examples irrelevant, as if they did not exist at all. Thus, based on its position in the *Trend* litigation, Implicit interprets “data that is related in some way” apart from the rest of the language that forms its proposed construction, and divorced from the language of the claims and the specification.

The specification (to which Implicit concedes we must look) repeatedly and exclusively discloses the invention as being directed to user data. It explains that in networked computer systems, “when data is generated on one computer system and is transmitted to another [] **to be displayed**, the data may be converted in many different intermediate formats **before it is eventually displayed.**” ’683 Patent at 1:27-31. Discussing the transmission of a bitmap image, the specification explains:

The receiving computer system would need to perform each of these conversions in reverse order to convert the data in the bitmap format. In addition, the receiving computer system may need to convert the bitmap data into a format that is appropriate for rendering on [the] output device.

Id. at 1:39-44. These same conversions must be performed on each packet of the “message.” Indeed, every example in the specification of a “message” is an example of content, *e.g.*, data that a user would actually see or hear – in other words, it is *application* data.

Against this backdrop, the specification explains that the claimed system “receives multiple messages with different source and target formats and identifies a sequence of conversion routines for each message.” *Id.* at 2:61-65. Then, “[t]he conversion system stores the identified sequence so that the sequence can be quickly found (without searching) when the next packet in the message is received.” *Id.* at 2:55-58.

The plain language of the claims mirrors this disclosure. For example, claim 1 of the ’683 Patent requires identifying “a sequence of routines” for processing packets in a “message”, and “process[ing] subsequent packets in the message using the sequence of routines.” ’683 Patent at

cl. 1. Accordingly, all packets of the “message” are processed using the same “sequence of routines,” because they contain related application data that must be processed in the same way.

A video, for example, is made up of multiple packets having application data that is related and formatted the same way (*e.g.*, MPEG video data). This video data (*i.e.*, application data) is what is disclosed as the “message” in the specification, and what is processed so that it can be viewed on the receiving system. In contrast, control or handshake information is used, for example, to establish a connection between two devices, and it is agnostic to the various formats of information that may subsequently be exchanged between those two devices over that connection. Accordingly, control or handshake information is not “related in some way” to subsequent packets containing application data. Indeed, a packet carrying video data, for example, needs to be processed differently than a handshake packet carrying no application data at all, and the specification never suggests how a handshake packet (or other non-application data packet) would be processed within the scope of the format conversions disclosed in the specification.

2. “process/processing . . . packets” (’683 Patent claims 1, 24; ’790 Patent claims 1, 8, 15; ’104 Patent claims 1, 3, 10, 16)

Implicit’s Proposal	PAN’s Proposal
“apply/applying one or more routines to packets”	“apply/applying one or more <u>conversion</u> routines to a packet”

The parties dispute whether this term requires simply applying “one or more routines” (as Implicit proposes), or whether it requires applying “one or more conversion routines” (as PAN proposes, per the underlined term above).

The specification requires that the sequence of routines that process packets must use conversion routines, and the specification does not disclose any processing that does not include one or more conversion routines:

- “A method and system for **converting a message** that may contain multiple packets from a source format into a target format. When a packet of a message is received, the conversion system in one embodiment searches for and identifies a sequence of **conversion routines** (or more generally message handlers) **for processing the packets of the message** by comparing the input and output formats of the conversion routines.” ’683 Patent at 2:42-49.
- “That is, the conversion system demultiplexes the messages by receiving the message, identifying the **sequence of conversion routines**, and controlling the **processing** of each message **by the identified sequence**.” *Id.* at 2:65-3:1.
- “The forwarding component is responsible for identifying the session of the **conversion routine that should next process the packet** and invoking that conversion routine.” *Id.* at 3:17-20.
- “**The conversion routine processes the packet** and then invokes the message send routine.” *Id.* at 4:32-34.
- “The label map get routine identifies a sequence of “edges” for **converting data in one format into another format**.” *Id.* at 4:45-46.
- “The demux component identifies a sequence of “edges” for **converting data in one format into another format** by invoking the label map get component.” *Id.* at 5:33-35.

Implicit’s proposal, on the other hand, would include any operation performed on a packet by a processor, without any conversion whatsoever. This is inconsistent with how “processing” is described in the specification.

The Court previously rejected the same construction PAN proposes here in the *Trend* litigation. PAN respectfully submits that the Court’s decision appears to be based on a concern that PAN can address and resolve here. Specifically, the Court reasoned that it was inappropriate to conclude that *all* routines had to be conversion routines. *Implicit, LLC v. Trend Micro, Inc.*, No. 6:16-cv-80-JRG, Claim Construction Memorandum Opinion and Order (“*Trend* Markman Order”), Dkt. 115 at 21. PAN’s proposal here, however, is not that *all* of the routines applied to a packet must be conversion routines; rather, PAN’s proposal is that “one or more” conversion routines must be applied. In other words, applying routines *other than* conversion routines is

consistent with PAN's proposal, as long as at least one – *i.e.*, “one or more” – conversion routines are also applied. Absent performing at least one conversion routine, the invention described in the specification, which is rooted in conversion of formats, would not be practiced.

Moreover, PAN's proposal is consistent with claim 6 of the '683 Patent, which simply requires that the sequence of routines “includes” a routine that does not convert a format. Claim 6 does not forbid any of the “sequence of routines” from being a routine that does convert a format. In other words, “process” itself requires at least one routine that is a conversion routine, and claim 6 requires at least one routine that is not a conversion routine.

Likewise, the Court previously found that compression and encryption routines (which it found are not conversion routines) can be used in the process of transmitting and receiving data, citing the '683 Patent at 1:24-44. *Trend* Markman Order at p. 22. Critically, however, the specification explains that these compression or encryption routines would necessarily be *in addition* to format conversion routines:

To send the data to another computer system, the computer system may first **compress** the bitmap data and **then encrypt** the compressed data. The computer system may **then convert that compressed data into a TCP format** and **then into an IP format**. The **IP formatted data may be converted into a transmission format**, such as an ethernet format. The data in the transmission format is then sent to a receiving computer system.

'683 Patent at 1:32-39. Thus, conversion routines are still required to practice the invention disclosed in the specification, as PAN has proposed.

3. “state information” (’104 Patent claims 1, 10, 16)

Implicit’s Proposal	PAN’s Proposal
plain and ordinary meaning	“information specific to a software routine for a specific message that is not information related to an overall path”

a. PAN’s Proposal is Compelled by the Intrinsic Record

“State information” was previously construed consistent with PAN’s proposal here in connection with the related U.S. Patent No. 6,629,163 (“the ’163 Patent) and U.S. Patent No. 7,711,857 (“the ’857 Patent)³ by Judge Illston in the Northern District of California. Ex. C, *Implicit Networks, Inc. v. F5 Networks, Inc.*, No. C10-3365-SI (N.D. Cal.), Feb. 29, 2012 Claim Construction Order, Dkt. 93, at 13-14 (N.D. Cal. Feb. 29, 2012). Judge Illston’s construction relied in part on a prosecution disclaimer that took place during a reexamination of the ’163 Patent, and is also consistent with the specification and prosecution history. This is shown by the following three points.

First, the specification explains that “state information” is specific to a software routine for a specific message:

[S]ince the conversion routines may need to retain state information between the receipt of one packet of a message and the next packet of that message, **the conversion system maintains state information as an instance or session of the conversion routine. The conversion system routes all packets for a message through the same session of each conversion routine** so that the same state or instance information can be used by all packets of the message.

’683 Patent at 3:1-9.

Second, the prosecution history of the related ’857 patent (which shares a specification with the Patents-in-Suit) confirms this interpretation. In response to an Office Action, the

³ The ’857 Patent, like the Patents-in-Suit, is a continuation of the ’163 Patent, and all of these patents share the same specification.

Applicant provided a “Brief Description **of the Present Invention**,” explaining that “the term ‘state’ **as used in the present application** is not the operational state of a state machine, but the identification of an instance or session of a conversion routine. When processing multiple messages, each instantiation of a conversion routine has its own state information.” Ex. D, ’857 Patent File History, 9/24/2009 Amendment at 10. The Applicant’s characterization of “state information” in “the Present Invention” and “the present application” applies to the Patents-in-Suit, regardless of any other differences in claim language. *Regents of Univ. of Minn. v. AGA Med. Corp.*, 717 F.3d 929, 943 (Fed. Cir. 2013) (disclaimer applies to different claims in a divisional application “when the disclaimer is directed to the scope of the invention as a whole, not a particular claim”); *Ormco Corp. v. Align Tech., Inc.*, 498 F.3d 1307, 1314 (Fed. Cir. 2007) (finding a disclaimer applied to a related patent when the patent owner’s statements “w[ere] not associated with particular language from [the] claims” but were directed to the “present invention” and the “overall method”). Implicit’s predecessor even agreed that “state information” is specific to a routine (component) for a specific message, proposing the following construction before Judge Illston: “[i]nformation specific to a component for a specific message.” Ex. C, Feb. 29, 2012 Claim Construction Order at 13 (“The parties agree that state information is information specific to a software routine (component) for a specific message.”).

Third, during a reexamination of the ’163 Patent (which also shares a specification with, and is the ultimate parent of, the Demultiplexing Patents at issue here), the Applicant distinguished the prior art Mosberger reference by arguing:

The Office Action states at page 6 that the inherency refers to ‘stored information related to the path (emphasis added).’ In contrast, claim 1 recites retrieving state information ‘relating to performing the processing of the component with the previous packet of the message’ as well as ‘storing state information relating to the processing of the component with the packet for use when processing the next packet of the message.’ Thus, claim 1 is directed to a method in which state

information for a specific component is stored on a component-by-component basis and is **not information related to an overall path**, as the Office Action describes Mosberger.

Ex. E, '163 Patent Reexamination, Amendment and Response to Office Action Mailed July 7, 2009 at 24. The Applicant distinguished Mosberger on grounds that it discloses a thread that relates to an overall path: “Mosberger does not anticipate a system that **stores state information related to each component in a system** simply by disclosing a thread that processes an **entire pathway.**” *Id.* at 30. Likewise, in an Interview Summary, the Applicant argued “[t]he system stores state information related to each component in the path.” Ex. F, '163 Reexamination Examiner Interview Presentation at 2.

Judge Illston relied on this disclaimer in reaching her construction of “state information”, and that construction likewise applies to the Patents-in-Suit. *Omega Eng'g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1334 (Fed. Cir. 2003) (“unless otherwise compelled ... the same claim term in the same patent or related patents carries the same construed meaning.”). This is not a situation in which the claim language of the Patents-in-Suit “otherwise compels” a different result. Indeed, claim 2 of the '163 Patent – a patent to which Judge Illston explicitly applied the disclaimer – uses the term “state information” in a nearly identical manner as claim 1 of the '104 Patent at issue here. *Compare* Ex. G, '163 Patent at cl. 2 (“... retrieving **state information relating to the message.**”) *with* '104 Patent at cl. 1 (“... store **state information associated with the message.**”).⁴ That claim 2 of the '163 Patent was not asserted in the prior litigation (and thus not explicitly addressed in Judge Illston's Order) is of no moment. *PODS, Inc. v. Porta Stor, Inc.*, 484 F.3d

⁴ Claim 1 of the '104 Patent's requirement of “state information associated with the message” is also fully consistent with PAN's proposed construction given the fact that “state information” is specific to a software routine for the “message,” and is thus “associated with the message.”

1359, 1366 (Fed. Cir. 2007) (“We apply a ‘presumption that the same terms appearing in different portions of the claims should be given the same meaning unless it is clear from the specification and prosecution history that the terms have different meanings at different portions of the claims.’”).

b. “Plain and Ordinary Meaning” Is Inappropriate

Implicit’s “plain and ordinary meaning” proposal rings hollow in light of the claims, specification, and prosecution history described above. This is confirmed by Implicit’s explanation of what it believes the plain and ordinary meaning to be. Implicit asserts that the plain and ordinary meaning is “information regarding the state of the computer.” Implicit Br. at 9. That interpretation is not supported by the claims or specification, which explicitly tie “state information” to specific software routines associated with a message, and not to a computer generally. Implicit’s interpretation would conceivably include things like whether the computer’s power is on, which has nothing to do with the claims. And, of course, Implicit’s proposal is at odds with the agreement of its predecessor that “state information” is information specific to a routine for a specific message, as noted above. Ex. C at 13.

Furthermore, and contrary to Implicit’s argument, claim 11 of the ’683 Patent – which is not asserted in this case – is entirely consistent with PAN’s proposed construction. Claim 11 requires that “one or more sessions” specify state information for “one or more” conversion routines, and “wherein **the state information is specific to the message.**” ’683 Patent at cl. 11. Implicit omitted the “wherein” phrase in its brief, but that phrase makes clear that “state information” is specific to a conversion routine for a given message (which is included in PAN’s proposed construction). In other words, if there is one session, then there is state information for one conversion routine; if there are “more sessions”, then there is state information for “more conversion routines.”

Likewise, Implicit is incorrect that claim 11 of the '683 Patent requires “state information” related to an overall path. Claim 11 does not even use the term “path” in connection with “state information,” but instead requires state information for each “conversion routine” that is “specific to the message.” *Id.* at cl. 11. Again, this is fully consistent with PAN’s proposal. But even if it were not, as noted above, Implicit has disclaimed an interpretation of claim 11 that would encompass “state information” for an overall path.

4. “key [value]” (’790 Patent claims 1, 2, 15, 16; ’104 Patent claims 1, 10, 16)

Implicit’s Proposal	PAN’s Proposal
plain and ordinary meaning	“information that identifies the session of a protocol” And, the “key [value]” must be determined in recited sequence of the claim

There are two separate disputes for “key [value],” which do not rise or fall together: (1) the meaning (construction) of the term “key [value]”; and (2) regardless of the construction of “key [value],” whether the “key [value]” in the claims must be determined in the recited sequence of the claim, as opposed to in any sequence.

a. The Meaning of “key [value]”

The term “key [value]” should be construed to avoid jury confusion. Implicit never explains what it believes is the plain and ordinary meaning of “key [value].” Nor does it proffer any evidence that this term would have a plain and ordinary meaning to a skilled artisan. Instead, Implicit argues that there are multiple different usages for the term. But if correct, that would only highlight the potential for confusion of leaving the jury to figure out the “plain and ordinary meaning”. *O2 Micro Int’l, Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir.

2008) (“[a] determination that a claim term ‘needs no construction’ or has the ‘plain and ordinary meaning’ may be inadequate when a term has more than one ‘ordinary’ meaning”).

The specification plainly states that: “[t]he key identifies the session of a protocol.” ’683 Patent at 11:22-23. That is PAN’s proposed construction. Implicit ignores this unambiguous statement from the specification. Further, the specification repeatedly confirms that the key corresponds to a specific session. *See id.* at 9:4-6 (“The get key routine creates the **key for the session associated with the message.**”); *id.* at 9:13-15 (“The routine get session returns **the session associated with the key**, creating a new session if necessary.”).

In the face of these disclosures, Implicit argues that the specification is somehow “inconsistent” with PAN’s proposed construction – which comes *directly from the specification* – without articulating any alleged inconsistencies. Instead, Implicit points to a line in the specification that “[t]he key identifies the state information for a session of a protocol.” Implicit Br. at 11 (citing Plaintiff’s Ex. 1 at 6:64-65). This is consistent with PAN’s proposal, as the “state information” is “for a session of the protocol.” That the “key” might identify something additional (*i.e.*, “state information” for the session) is irrelevant; PAN’s proposal does not limit the “key [value]” to *only* identifying the session of a protocol, nor does it limit *how* the key value identifies the session of a protocol (*e.g.*, by using “state information”).

Implicit also appears to argue that a “target key” and “pKey” – which are different terms than the “key [value]” that appears in the claims at issue here – are somehow inconsistent with PAN’s proposal. Setting aside whether a “target key” and “pKey” are the same as the claimed “key [value],” the specification teaches that a “target key” in fact “identifies the session associated with the protocol,” just as PAN has proposed for “key [value]”. ’683 Patent at 6:28-29 (“**A target key identifies the session associated with the protocol** that converts the packet to the target

label.”). Implicit has not provided any evidence from the specification that a “pKey” means anything different. This is likely because the specification provides no discussion of a “pKey,” and certainly no indication that it is in any way inconsistent with PAN’s proposed construction.

b. The Sequence of the Steps

The “key [value]” must be determined in the recited sequence of the claims. The Federal Circuit has set forth a two-phase inquiry for determining when the steps recited in a claim must be performed in the order written. *Altiris, Inc. v. Symantec Corp.*, 318 F.2d 1363, 1369 (Fed. Cir. 2003). “First, we look to the claim language to determine if, as a matter of logic or grammar, they must be performed in the order written.” *Id.* (citing *Interactive Gift Express, Inc. v. CompuServe Inc.*, 256 F.3d 1323, 1343 (Fed. Cir. 2000)). “If not, we next look to the rest of the specification to determine whether it ‘directly or implicitly requires such a narrow construction.’” *Id.* at 1370 (citing *Interactive Gift*, 256 F.3d at 1343). Here, the claim language requires “as a matter of logic or grammar” that the “key [value]” be determined in the order written.

First, the claim language itself requires that the recited steps be performed in order. For example, claim 1 of the ’104 Patent recites “a memory storing instructions executable by the processing unit to:”

- “receive one or more packets...”
- “**determine a key value** using information in the one or more packets”
- “identify, **using the key value**, a sequence of two or more routines ...”
- “create a path that includes one or more data structures that indicate **the identified sequence of two or more routines** ...”
- “process subsequent packets in the message **using the sequence of two or more routines** indicated in **the path**.”

'104 Patent at cl. 1. An examination of the antecedent bases in each phrase requires that the preceding phrase must occur before the following phrase can commence. For example, according to the claim, a “key value” must first be “determined” before it is possible to “identify, **using the key value**, a sequence of two or more routines.” *Id.* Claims 10 and 16 of the '104 Patent contain similar limitations. *Id.* at cl. 10, 16. Thus, as a matter of logic and grammar, the determination of the “key [value]” in claims 1, 10, and 16 of the '104 patent must occur before “identify[ing] . . . a sequence of two or more routines,” “creat[ing] a path,” and “process[ing] subsequent packets,” and cannot happen in any arbitrary order. *Altiris*, 318 F.3d at 1369-70; *see also Ampex Corp. v. Eastman Kodak Co.*, 460 F.Supp. 2d 541, 560 (D. Del. 2006) (“When a subsequent step references something which indicates that a prior step had been performed, the steps of the method claim must be performed in the order written.”).⁵

Independent claims 1 and 15 of the '790 Patent likewise contain language requiring a particular order as a matter of logic and grammar. Claim 1, for example, requires “a memory storing instructions executable by the processing unit to:”

- “**identify a path** for one or more received packets of a message, wherein the path indicates a sequence of two or more routines for processing packets in the message,”
- “wherein **the path is identified based on a key located in one of the received packets**, and wherein the key includes an IP address and a port address; and”
- “process the one or more received packets using the sequence of routines indicated in the identified path, . . .”

⁵ The fact that some of the asserted claims are apparatus claims does not change the analysis. The Federal Circuit in *Altiris* addressed both method and apparatus claims. *See Altiris*, 318 F.3d at 1367-68 (addressing claim structured as “An apparatus . . . comprising: . . .”). This Court has likewise acknowledged that “[b]oth the Federal Circuit and this court have, under certain circumstances, imposed a sequential order of method steps in the context of device and system claims.” *Versata Software, Inc. v. SAP America, Inc.*, 2009 WL 1408520, *12–13 (E.D. Tex. May 19, 2009) (citing *Oak Tech., Inc. v. ITC*, 248 F.3d 1316, 1325 (Fed. Cir. 2001); *Visto Corp. v. Good Tech., Inc.*, 2008 WL 163576, *6 (E.D. Tex. 2008)).

'790 Patent at cl. 1. Here, the claim language again makes clear – as a matter of logic and grammar – that the “key” must have been included in a “received packet” before the “path” is identified, because the identification of the path is **“based on** a key located in one of the received packets.” Claim 10 of the '790 patent contains similar requirements. *Id.* at cl. 10. In other words, the claim language precludes, *e.g.*, an interpretation of the claim that identifies a “path” prior to identifying a “key.”

Implicit argues that “to the extent PAN argues that the key must be determined before the path is created, it is incorrect” in light of a “preferred embodiment” in which the “get key routine” “may be executed whether or not a path already exists.” Implicit Br. at 11. Implicit misconstrues PAN’s argument. PAN’s argument is simply that the claim language dictates the order of the steps, which may vary depending on the claim. But even so, Implicit’s attempt to read a single embodiment into all of the claims is inappropriate. As noted above, the asserted claims of the '104 Patent explicitly require “creating” a path as opposed to “extending” one. '104 Patent at cl. 1 (“**create a path** that includes one or more data structures that indicate the identified sequence of two or more routines ...”). The asserted claims of the '790 Patent, however, require “identify[ing] a path.” Whichever language the claim uses, in each instance, the rules of logic and grammar dictate that the “key” be identified or determined beforehand. Different claims can have different claim scope, as claims can cover different embodiments. *Intamin, Ltd. v. Magnetar Techs., Corp.*, 483 F.3d 1328, 1336 (Fed. Cir. 2007) (“A patentee may draft different claims to cover different embodiments.”).

5. “removing [an / the resulting] outermost header” (’683 Patent, cl. 24)

Implicit’s Proposal	PAN’s Proposal
“advancing the reference past the header information”	plain and ordinary meaning

The word “removing” is easily understood by a jury. Implicit attempts to replace the word “removing” with “advancing the reference past,” but provides no support for its argument that one of ordinary skill in the art would somehow understand that “removing” means something completely different than the normal use of the word.

In fact, the extrinsic evidence shows that one of ordinary skill in the art *would* understand “removing” to be its plain and ordinary meaning – *e.g.*, stripping off or deleting a header: “[a]t the receiving machine the message moves upward, from layer to layer, **with headers being stripped off as it progresses**. None of the headers for layers below *n* are passed up to layer *n*.” Ex. H, Tanenbaum, Computer Networks, 3d. (1996) at 20. The inventor did not act as his own lexicographer to redefine this basic word. *Renishaw*, 158 F.3d at 1249 (“The patentee’s lexicography must, of course, appear with reasonable clarity, deliberateness, and precision before it can affect the claim.”).

Implicit’s proposed construction also fails because it strikes the term “outermost” from the claim phrase. Implicit likely struck “outermost” because its proposed construction makes no sense in light of the plain language of the claim, which requires: “process subsequent packets . . . including by **removing an outermost header** of a given packet using a first routine . . . and by removing **the resulting outermost header** using a second routine”. ’683 Patent at cl. 24. To borrow Implicit’s example, a packet might look like the following: <header1><header2><header3><data>. Logically, the only way a given header can be the “outermost” header is if there are no other headers outside of it. Thus, in order to “remov[e] **the**

resulting outermost header using a second routine” as required by the plain language of claim, the first “outermost header” must have already been “remov[ed]”. In other words, for <header2> to become the “resulting outermost” header (as required by the claim), the previous “outermost” header (which was <header1>) must first be removed (*i.e.*, stripped off or deleted). Simply looking at a different location in memory, as Implicit proposes, could not cause a “resulting outermost header,” as required by the claim.⁶

The only support Implicit cites for its construction is a passage from the specification generally explaining a concept of a “reference” or pointer. However, the specification in no way limits the claims to this concept or re-defines the term “remove” as being this concept. While it may be possible for a computer to read different portions of a packet by accessing memory locations, that is simply not what the claim recites. The claim plainly requires “removing” the “outermost header.” Had the Applicant intended to claim advancing references past headers, he could have done so. For instance, the Applicant addressed “references” in other claims. *See, e.g.*, ’104 Patent at cl. 11 (“the created one or more data structures **include a reference** to the key value and to a queue for storing packets of the message for processing.”). Accordingly, Implicit’s construction should be rejected in favor of the plain and ordinary meaning.

⁶ Implicit’s proposal also injects an antecedent basis problem into the claim when it refers to “the reference.” The only other use of the term “reference” in the claim is “one or more data structures **that reference** a sequence of routines.” ’683 Patent at cl. 24. In this phrase, “reference” is a verb, indicating what the “one or more data structures” *do*. It cannot serve as an antecedent basis for a noun – e.g., a “pointer” or “reference” to a memory location that “can be passed to each conversion routine” as Implicit argues to support its construction. Implicit Br. at 12-13 (citing Plaintiff’s Ex. 1 at 14:10-16). Thus, Implicit’s construction also fails as a simple matter of grammar.

C. The Applet Patent

The only disputed term in the Applet Server Patent is “resource,” which is addressed below.

1. “resource” (’740 Patent, Claims 1, 9, 10, 11, 13, 19, 20)

Implicit’s Construction	PAN’s Construction
plain and ordinary meaning	Data object containing code that: (1) is an application, (2) is an applet, or (3) can be used to build an application or applet.

PAN adopts the Court’s well-reasoned and fully supported construction of “resource” from the *Trend* Markman Order. There, the Court properly found that the term “resource” as used in the claims of the ’740 Patent must be understood in the context of the ’740 Patent disclosure, which the Court found is “directed to provision of applets/applications.” *Trend* Markman Order, at 36. Considering this disclosure, the Court found that “[t]he claims of the ’740 Patent are directed to providing applet source-code resources from an external network, not just ‘any data object that may be referred to by a URL.’” *Id.* This conclusion is evident from the claim context, because each claim requires that “the resource includes source code” and because the “claim language closely parallels the described embodiments in which the server collects ‘local resources’ from an external network to use those resources to provide the application that [the] client requests.” *Id.* at 36-37. And this conclusion is consistent with the use of the term “resource” in the ’740 Patent to refer to “program modules 32 (applets in source form, not requested form)” that are either locally stored at the applet server (’740 Patent at 4:54-56; *also* 4:21-23) or available on an external network (*id.* at 4:29-36). *Trend* Markman Order, at 36.⁷

⁷ The description of the “*invention*” in the ’740 Patent specification as an “applet server” that responds to client requests for programs, either “applets” or “applications,” also compels the Court’s construction of the term “resource.” *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1308 (Fed. Cir. 2007) (“When a patent thus describes the features of the ‘present

Implicit does not identify any errors in the Court’s prior construction of this term or its analysis. In fact, Implicit concedes, as it must, that the Court’s construction is “consistent with the way in which ‘resource’ is used in the claims of the ’740 patent.” Implicit Br. at 13. The only argument that Implicit musters is that the specification also uses the term “resource” in other ways that are *not* relevant to the way the term is used in the claims. *Id.* at 14 (citing examples of “resources” disclosed in the specification that do not have source code, including (i) “compilers”; (ii) memory resources; and (iii) system resources, i.e., IO devices). These contextually irrelevant uses of “resource” in the specification cannot compel a construction different than the Court’s construction, which is supported by *relevant* claim context and usage of the term “resource” in the specification.⁸

Therefore, for these reasons and those set forth in the Court’s *Trend* Markman Order, the Court should adopt its prior construction of “resource.”

invention’ as a whole, this description limits the scope of the invention.”). *See, e.g.*: ’740 Patent, Abstract (“**The present** invention is an applet server which accepts requests for applets from client computers.”); *see also id.* at 2:32-36 (“In accordance with one embodiment **of the invention**, an applet server architecture is taught which allows client computers to request and execute applets in a safe manner without requiring the client to have local resources to verify or compile the applet code.”), 3:20-23 (“Referring to FIG. 1, an applet server architecture according to one embodiment **of the invention** is based on an applet server computer 10 which in turn is connected to client computer A 12, client computer B 14, an external network 16...”).

⁸ “The claims, of course, do not stand alone [They] must be read in view of the specification, of which they are a part. ... The specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (en banc) (citations omitted).

Respectfully submitted this 26th day of January, 2018.

/s/ David C. Dotson

L. Norwood Jameson (Georgia Bar No. 003970)

Matthew S. Gaudet (Georgia Bar No. 287789)

David C. Dotson (Georgia Bar No. 138040)

John R. Gibson (Georgia Bar No. 454507)

S. Neil Anderson (Georgia Bar No. 757113)

DUANE MORRIS LLP

1075 Peachtree Street

Suite 2000

Atlanta, Georgia 30309

Telephone: 404.253.6900

Facsimile: 404.253.6901

GILLAM & SMITH LLP

Melissa Richards Smith

Texas Bar No. 24001351

303 S. Washington Ave.

Marshall, Texas 75670

903-934-8450

Fax: 903-934-9257

E-mail: melissa@gillamsmithlaw.com

Attorneys for Defendant

Palo Alto Networks, Inc.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of **Palo Alto Networks' Responsive Claim Construction Brief** via the Court's CM/ECF system per Local Rule CV-5(a)(3) on January 26, 2018. Any other counsel of record will be served by first class mail.

/s/ Melissa Richards Smith